

Attorney Docket No. <u>1034136-000035</u>

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of) Group Art Unit: Unassigned
Zhongxin Ge et al.) Examiner: Unassigned
Application No.: 10/594,432) Confirmation No.: Unassigned
Filing Date: September 26, 2006)
Title: PEGYLATION AND HYDROXYLATION OF TRIMETALLIC NITRIDE ENDOHEDRAL METALLOFULLERENES)))

SECOND INFORMATION DISCLOSURE STATEMENT TRANSMITTAL LETTER

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

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form I	Enclosed is a SECOND In PTO-1449 for the above-ide	formation Disclosure Statement (IDS) and accompanying ntified patent application.
\boxtimes	No additional fee for subm	nission of an IDS is required.
	The fee of 180 as set forth	in 37 C.F.R. § 1.17(p) is also enclosed.
	A statement under 37 C.F	.R. § 1.97(e) is also enclosed.
	A statement under 37 C.F 37 C.F.R. § 1.17(p) are als	.R. § 1.97(e), and the fee of 180 as set forth in so enclosed.
	Charge	to Deposit Account No. 02-4800 for the fee due.
	A check in the amount of	is enclosed for the fee due.
	Charge	to credit card for the fee due. Form PTO-2038 is attached.
\boxtimes	37 C.F.R. §§ 1.16, 1.17 ar	horized to charge any appropriate fees under and 1.21 that may be required by this paper, and to credit esit Account No. 02-4800. This paper is submitted in
		Respectfully submitted,
		BUCHANAN INGERSOLL AND ROONEY PC
Date	April 9, 2007	By: Ch Y total

Christopher L. North Registration No. 50433

P.O. Box 1404 Alexandria, VA 22313-1404 1737 King Street, Suite 500 Alexandria, VA 22314-2727 703 836 6620

Buchanan Ingersoll & Rooney PC
Attorneys & Government Relations Professionals



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SECOND INFORMATION DISCLOSURE STATEMENT

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Sir:

In accordance with the duty of disclosure as set forth in 37 C.F.R. § 1.56, the accompanying information is being submitted in accordance with 37 C.F.R. §§ 1.97 and 1.98. Pursuant to 37 C.F.R. § 1.98, a copy of each of the documents cited is enclosed. However, copies of the listed U.S. patents and U.S. patent application publications are not enclosed since it is no longer required according to the July 11, 2003 waiver of the requirement for copies of cited U.S. patents and U.S. patent application publications in national patent applications filed after June 30, 2003 and international applications entering the national stage under 35 U.S.C. § 371 after June 30, 2003.

U.S. PATENT DOCUMENTS

- 1. KATORI et al., U.S. Patent Publication No. 2003/0031917 A1, published on February 13, 2003.
 - 2. EKLUND, U.S. Patent No. 5,453,413, issued on September 26, 1995.
- 3. KAJIURA et al., U.S. Patent Publication No. 2003/0015414 A1, published on January 23, 2003.
- 4. TAKIKAWA et al, U.S. Patent Publication No. 2002/0061638 A1, published on May 23, 2002.
- 5. ANAZAWA et al., U.S. Patent Publication No. 2001/0050219 A1, published on December 13, 2001.
 - 6. ZETTL et al., U.S. Patent No. 6,063,243, issued on May 16, 2000.

Buchanan Ingersoll & Rooney PC
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7. CRESPI et al., U.S. Patent Publication No. 2005/0067349 A1, published on March 31, 2005.

NON-PATENT LITERATURE DOCUMENTS

- 1. IEZZI, ERICK B. ET AL., "A Symmetric Derivative of the Trimetallic Nitride Endohedral Metallofullerene, Sc₃N@C₈₀," J.AM.CHEM.SOC., 2002, pp. 524-525, Vol. 124, No. 4, American Chemical Society.
- 2. KRATSCHMER, W. ET AL., "Solid C_{60} : a new form of carbon," NATURE, 9/27/90, pp. 354-358, Vol. 347, Nature Publishing Group.
- 3. OLMSTEAD, MARILYN M. ET AL., "Isolation and Crystallographic Characterization of ErSc₂N@C₈₀: an Endohedral Fullerene Which Crystallizes with Remarkable Internal Order," J.SM.VHRM.SOC., 2000, pp. 12220-12226, Vol. 122, No. 49, American Chemical Society.
- 4. STONE, A.J. ET AL., "Theoretical Studies of Icosahedral C₆₀ and Some Related Species," Chem. Physics Ltrs., 8/8/86, pp. 501-503, Vol. 128, No. 5,6, Elsevier Science Publishers B.V.
- 5. TRULOVE, "Filled buckyballs diamonds from soot," article from website http://www.research.vt.edu/resmag/2002winter/buckyballs.html, 9 March 2002 (09.03.2002), available at www.archive.org. (entire document).
- 6. NAGASE et al., Chapter 9: Endohedral metallofullerenes: theory, electrochemistry, and chemical reactions, of Fullerenes: Chemistry, Physics and Technology (Kadish and Ruoff, eds.), 2000, John Wiley and Sons, pp. 395-429.
- 7. ZHANG et al., "The tribological behaviors of ordered system ultrathin films," *Science*, 2003, vol. 254, pp. 959-964, Elsevier Science, B.V., London, England.
- 8. JOURNET et al., "Large-scale production of single-walled carbon nanotubes by the electric-arc technique," *Nature*, 1997, vol. 388, pp. 756-758, American Association for the Advancement of Science, Washington, D.C.
- 9. SAITO et al., "Single-Layered Carbon Nanotubes Synthesized by Catalytic Assistance of Rare-Earths in a Carbon Arc," *J. Phys. Chem.*, 1995, vol. 99, pp. 16076-16079, American Chemical Society, Washington, D.C.
- 10. WILSON et al., "Advanced materials: fluorous fullerenes and nanotubes," *Tetrahedron*, 2002, vol. 58, pp. 4041-4047, Elsevier Science Ltd.

The documents are being submitted within three (3) months of the filing or entry of the national stage of this application or before the first Office Action on the merits, whichever

SECOND Information Disclosure Statement Application No. <u>10/594,432</u> Attorney's Docket No. <u>1034136-000035</u> Page 3

is later. Since these documents are being filed within the time period set forth in 37 C.F.R. § 1.97(b), no fee or statement is required.

To assist the Examiner, the documents are listed on the attached form PTO-1449. It is respectfully requested that an Examiner initialed copy of this form be returned to the undersigned.

By:

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: April 9, 2007

Christopher L. North Registration No. 50433

P.O. Box 1404 Alexandria, VA 22313-1404 703 836 6620 Substitute for form 1449/PTO & 1449B/PTO

Sheet 1 of

SECOND INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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	Complete if Known	199
Application Number	10/594,432	APR 0 9 2007
Filing Date	September 26, 2006	漫 3
First Named Inventor	Zhongxin Ge et al.	The state of
Examiner Name	Unassigned	RADENAM
Attorney Docket No.	1034136-000035	

	U.S. PATENT DOCUMENTS					
Examiner Initials	Document Number	Kind Code (if known)	Name of Patentee or Applicant of Cited Document	Issue/Publication Date (MM-DD-YYYY)		
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Examiner Initials	Document Number	Kind Code (if known)	Country	Date of Publication (MM-DD-YYYY)	Translation	Partial Translation	Eng. Lang. Summary	Search Report	IPER	Abstract	Cited in Spec

	NON-PATENT LITERATURE DOCUMENTS
Examiner Initials	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
	IEZZI, ERICK B. ET AL., "A Symmetric Derivative of the Trimetallic Nitride Endohedral Metallofullerene, Sc₃N@C ₈₀ ," J.AM.CHEM.SOC., 2002, pp. 524-525, Vol. 124, No. 4, American Chemical Society
n .	KRATSCHMER, W. ET AL., "Solid C ₆₀ : a new form of carbon," NATURE, 9/27/90, pp. 354-358, Vol. 347, Nature Publishing Group
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***	STONE, A.J. ET AL., "Theoretical Studies of Icosahedral C ₆₀ and Some Related Species," Chem. Physics Ltrs., 8/8/86, pp. 501-503, Vol. 128, No. 5,6, Elsevier Science Publishers B.V.
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	NAGASE et al., Chapter 9: Endohedral metallofullerenes: theory, electrochemistry, and chemical reactions, of Fullerenes: Chemistry, Physics and Technology (Kadish and Ruoff, eds.), 2000, John Wiley and Sons, pp. 395-429.
	ZHANG et al., "The tribological behaviors of ordered system ultrathin films," <i>Science</i> , 2003, vol. 254, pp. 959-964, Elsevier Science, B.V., London, England.
	JOURNET et al., "Large-scale production of single-walled carbon nanotubes by the electric-arc technique," <i>Nature</i> , 1997, vol. 388, pp. 756-758, American Association for the Advancement of Science, Washington, D.C.
	SAITO et al., "Single-Layered Carbon Nanotubes Synthesized by Catalytic Assistance of Rare- Earths in a Carbon Arc," <i>J. Phys. Chem.</i> , 1995, vol. 99, pp. 16076-16079, American Chemical Society, Washington, D.C.
	WILSON et al., "Advanced materials: fluorous fullerenes and nanotubes," <i>Tetrahedron</i> , 2002, vol. 58, pp. 4041-4047, Elsevier Science Ltd.

Examiner	Date	
Signature	Considered	